

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Phoenix Specialty Manufacturing Company

#### South Carolina Manufacturing Extension Partnership

#### Improving Competitiveness

##### Client Profile:

Since 1907, Phoenix Specialty Manufacturing Company has provided custom washers, shims and precision stampings to original equipment manufacturers (OEMs). Phoenix opened its plant in Bamberg, South Carolina in 1965 and relocated the entire company there from New York in 1976. Now, the company has more than 3,000 OEM customers and supplies tens of thousands of part numbers each year from its 140,000 square feet of office, manufacturing, and warehousing space. The job shop specializes in short and medium runs, and the company most values its reputation for being the fastest supplier of custom parts. Product quality and reliable service are two other critical areas whereby the company differentiates itself from competitors. New custom washers are delivered within a maximum of two weeks. Phoenix Specialty currently has 90 employees.

##### Situation:

Like many other manufacturing facilities, Phoenix Specialty felt the squeeze of the move to less costly offshore outsourcing. The company needed a way to be more competitive and distinguish itself from offshore suppliers. The goal was to be the absolute fastest supplier of the wide range of stamped components it produces.

##### Solution:

Robert (Bob) Hurst, Phoenix Specialty's president and South Carolina Manufacturing Extension Partnership (SCMEP), a NIST MEP network affiliate, board member, approached the Institute for Manufacturing Productivity (IMP) at York Technical College in late 2004, when he heard about the IMP's work with machine tool companies and the metalworking industry. The IMP's strategy is to bring work back into the U.S. by reviewing machining processes in the light of new technologies and then showing manufacturers how to lower production costs in order to compete with offshore producers. York Tech and SCMEP have an ongoing working relationship aimed at maximizing ROI for area manufacturers through consultation and training.

Phoenix Specialty's staff was making tooling sections on two CNC lathes, a CNC machine center, and EDM equipment. Through reviews of its cycle time, setup, and throughput of the current die manufacturing operations, the IMP team recommended an Okuma 9-axis multi-function CNC machine tool, which Hurst purchased. Then raw stock could be loaded into the right chuck, and the finished tool section would be completed on the left chuck. "There are not many of these machines in the world," said William Beaver, P.E., of York Technical College. "We believe Phoenix is the first in South Carolina to invest in this new type of technology."

##### Results:

\* Procured Okuma 9-axis multi-function CNC machine tool, replacing two machines.

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

- \* Reduced cycle time from 5 days to 2 days.
- \* Eliminated two setups, improving quality and consistency.

**Testimonial:**

"The overall time, tooling, and equipment investment was \$500,000 over the four-month implementation period."

Robert Hurst, President